The opinion in support of the decision being entered today was <u>not</u> written for publication in a law journal and is <u>not</u> binding precedent of the Board.

Paper No. 40

Werther

UNITED STATES PATENT AND TRADEMARK OFFICE

SEP 2 5 2002

PAT. & T.M. OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

SEP 5 0 2002

RECEIVED

Ex parte BERNHARD MULLER

ANDREA DECECCHIS DOCKET COORDINATOR PATENT DEPARTMENT

Appeal No. 2001-0810 Application No. 08/801,327

ON BRIEF

Before KIMLIN, OWENS and NAGUMO, <u>Administrative Patent Judges</u>.

KIMLIN, <u>Administrative Patent Judge</u>.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 2, 3, 5-10 and 16-19. Claims 11 and 12, the other claims remaining in the present application, stand objected to by the examiner as containing allowable subject matter. A copy of illustrative claim 16 is appended to this decision.

00/4-20161/A/CONT/CPA4

DOCKETED
FOR: Nov. 25, 2002

ap. to CARC/Reg. for Consid.

The examiner relies upon the following reference as evidence of obviousness:

Harms et al. (Harms) 2,034,731 Jun. 11, 1980 (United Kingdom Patent Application)

Appellant's claimed invention is directed to an anthraquinone dye of the recited formula. According to appellant, "reactive anthraquinone dyes of the present invention are suitable for dyeing or printing a wide variety of hydroxylgroup-containing or nitrogen-containing fiber materials such as cellulosic fiber materials like cotton and regenerated cellulose or natural or synthetic polyamide fiber materials such as wool, silk and synthetic polyamide" (page 4 of principal brief, second paragraph).

Appealed claims 2, 3, 5-10 and 16-19 stand rejected under 35 U.S.C. § 103 as being unpatentable over Harms.

Appellant submits at page 4 of the principal brief that claims 8-10 and 19 are argued separately. Accordingly, claims 2, 3, 5-7 and 16-18 stand or fall together.

We have thoroughly reviewed each of appellant's arguments for patentability, as well as the declaration evidence relied upon in support thereof. However, we are in agreement with the examiner that the claimed subject matter would have been obvious to one of ordinary skill in the art within the meaning of

35 U.S.C. § 103 in view of the applied prior art. Accordingly, we will sustain the examiner's rejection.

Harms, like appellant, discloses a genus of anthraquinone dyes that are suitable for dyeing or printing textile materials containing hydroxyl groups or nitrogen groups, e.g., natural and regenerated cellulose and wool, etc. Indeed, appellant acknowledges that Harms "generically discloses water soluble reactive dyes which include the dyes of instant formula (1)" (page 5 of principal brief, first paragraph). The focus of this appeal centers upon the presently claimed linking group B1, which can be $-CH_2-C(CH_3)_2-CH_2-$. Harms, however, specifically teaches at page 1, line 35, that the corresponding linking group may be $-CH_2-C(CH_3)_2-CH_2-$. Although the reference does not exemplify a dye having the linking group at issue, appellant concedes that "[n]evertheless, appellant does not dispute that the alkylene bridging members claimed herein of the formulae $-CH_2-CH_2-CH(C_2H_5)$ - and $-CH_2-C(CH_3)_2-CH_2$ would have been obvious to the skilled artisan absent the showing of criticality" (page 5 of principal brief, penultimate paragraph).

In order to rebut the obviousness of the claimed dyes, appellant relies upon his Declaration of August 22, 1996, wherein appellant compares the specific dye of appealed claim 19

(a linking group of $-CH_2-C(CH_3)_2-CH_2-$) with the dye of Example No. 78 of Harms. The examiner, however, properly noted that Example No. 78 of Harms does not represent the closest prior art which, instead, is represented by Example Nos. 48 and 74 of the reference, which also have a linking group comprising a dimethylsubstituted propylene chain. In response to the examiner's position, "[a]ppellant acknowledges that the dyes of the cited reference having the closest structural similarity to the instantly claimed dyestuffs are the dyes obtainable from the reactants shown in the Examples 48 and 74 of Harms" (page 6 of principal brief, third paragraph). It is appellant's position, however, that a proper comparison with the dyes of Example Nos. 48 and 74 of Harms could not be conducted since a necessary intermediate compound for preparing the dyes of Examples Nos. 48 and 74, 2,4-diaminopentane, is not commercially available, and was unable to be prepared by appellant by procedures conventional in the art for making such amines (appellant cites the Declaration of March 7, 2000). Accordingly, appellant contends that Harms does not enable one of ordinary skill in the art to synthesize the dyes of Examples Nos. 48 and 74.

Our review of the evidence of record finds us of the persuasion that appellant has not shouldered his burden of

establishing that one of ordinary skill in the art would be unable to make the dyes of Example Nos. 48 and 74 of Harms. While the declarant attempts to make 2,4-diaminopentane by either the catalytic hydrogenation of pentanone-2,4-dioxime, or the reductive amination of 2,4-dioxopentane (acetylacetone), appellant has not established that these are the only two ways known in the art for making compounds such as 2,4-diaminopentane. Furthermore, appellant has not convincingly demonstrated that the declarant conducted the type of adaptations to the tested procedures that would have been performed by one of ordinary skill in the art. In re Lamberti, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); <u>In re Weber</u>, 405 F.2d 1403, 1407, 160 USPQ 549, 553 (CCPA 1969); <u>In re Michalek</u>, 162 F.2d 229, 231-32, 74 USPQ 107, 109 (CCPA 1947). Furthermore, and most significantly, appellant has not established that the procedures described in the Declaration did not, in fact, produce some 2,4-diaminopentane. Procedure A, Procedure B and Procedure C all describe the result as "numerous products were detected," without naming the actual products obtained. In addition, the declarant states under the heading "Conclusion" that "[a] uniform reaction product was not obtained by catalytic hydrogenation of pentanone-2,4-dioxime under the conditions outlined in paragraph 2.1 as

revealed by gas-chromatography" (emphasis added). The declarant does not, however, conclude that no 2,4-diaminopentane was present in the reaction product but, only, that the reaction product was not uniform. Consequently, for the stated reasons, we find that appellant has not demonstrated that one of ordinary skill in the art would be unable to make the anthraquinone dyes of Example Nos. 48 and 74 of Harms.

We need not reach the dispute whether the Buxtorf et al. article cited by the examiner describes the synthesis of 1,3-dimethyl-1,3-diaminopropane, another name for 2,4-diaminopentane. Suffice it to say that the argument presented by appellant in the Reply Brief is without factual support. Also, we have not considered the references cited by the examiner in the letter of Paper No. 39. Accordingly, in the event of further prosecution of the subject matter, such as by way of a continuation application, these matters should be pursued further.

In conclusion, based on the foregoing, it is our judgment that the evidence of obviousness presented by the examiner has not been rebutted by appellant. Accordingly, the examiner's decision rejecting the appealed claims is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR \$ 1.136(a).

AFFIRMED

EDWARD C. KIMLIN
Administrative Patent Judge

TERRY O. OWENS
Administrative Patent Judge

BOARD OF PATENT APPEALS AND INTERFERENCES

MARK NAGUMO

Administrative Patent Judge

ECK:clm

Joann Villamizar CIBA Specialty Chemicals Corp. P.O. Box 2005 520 White Plains Road Tarrytown, NY 10591-9005

APPENDIX

16. An anthraquinone dye of the formula

$$\begin{array}{c|c}
O & NH_2 \\
\hline
O & N & B_1 & N & N \\
\hline
O & N & B_1 & N & N & N \\
\hline
O & N & B_1 & N & N & N \\
\hline
O & N & B_2 & N & N & N
\end{array}$$
(1).

wherein

 R_1 , R_2 and R_3 are each independently of one another hydrogen or C_1 - C_{12} alkyl which is unsubstituted or substituted by hydroxyl, sulfo or sulfato and, with the exception of methyl, may be interrupted by oxygen,

 X_1 is chloro or fluoro,

 B_1 is methylene-phenylene-methylene which is unsubstituted or substituted in the phenylene ring by C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_2 - C_4 alkanoylamino, halogen, carboxy or sulfo, or is a radical of formula - CH_2 - CH_2 - $CH(C_2H_5)$ -, - CH_2 -CH(OH)- CH_2 - or - CH_2 - $C(CH_3)_2$ - CH_2 -, Y is hydrogen, or C_1 - C_{12} alkyl which is unsubstituted or substituted by hydroxyl, sulfo or sulfato and, with the exception of methyl, may be interrupted by oxygen, or phenyl or naphthyl, each unsubstituted or substituted by

 C_1-C_4 alkyl, C_1-C_4 alkoxy, C_2-C_4 alkanoylamino, halogen, carboxy, sulfo or a radical of formula $-SO_2-Z$, wherein Z is a group of formula $-CH=CH_2$ or $-CH_2-CH_2-U_1$, and U_1 is a leaving group, or

Y is an anthraquinone of the formula

$$\begin{array}{c} O \\ NH_2 \\ SO_3H \\ O \\ HN \\ B_2 \end{array}$$
 (3),

wherein B_2 is C_2 - C_{12} alkylene which is unsubstituted or substituted by hydroxyl, sulfo or sulfato, and which may be interrupted by oxygen, or methylene-phenylene-methylene which is unsubstituted or substituted in the phenylene ring by C_1 - C_4 alkyl, C_1 - C_4 alkoxy, C_2 - C_4 alkanoylamino, halogen, carboxy or sulfo.